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BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS

BOB BURNS – Chairman
BOYD DUNN
SANDRA KENNEDY
JUSTIN OLSON
LEA MÁRQUEZ PETERSON

IN THE MATTER OF THE APPLICATION
OF ARIZONA PUBLIC SERVICE COMPANY
FOR A HEARING TO DETERMINE THE FAIR
VALUE OF THE UTILITY PROPERTY OF
THE COMPANY FOR RATEMAKING
PURPOSES, TO FIX A JUST AND
REASONABLE RATE OF RETURN
THEREON, TO APPROVE RATE SCHEDULES
DESIGNED TO DEVELOP SUCH RETURN.

Docket No. E-01345A-19-0236

**NOTICE OF FILING
SIERRA CLUB'S
SURREBUTTAL TESTIMONY**

Pursuant to the Procedural Order issued by the Arizona Corporation Commission on November 20, 2020, Sierra Club hereby files the Surrebuttal Testimony of Cheryl Roberto, Tyler Comings, and Sandy Bahr to be presented at the January 14, 2021 Hearing in this matter. After discussions with Arizona Public Service, both Sierra Club and the Company agree that certain calculations and results from Mr. Comings' Direct Testimony, which are referenced in the attached testimony, may be made public. Sierra Club intends to file a Notice of Errata with the updates to Tyler Comings' Direct Testimony later today.

RESPECTFULLY SUBMITTED this 4th day of December, 2020.



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IN THE MATTER OF THE APPLICATION OF
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A HEARING TO DETERMINE THE FAIR
VALUE OF THE UTILITY PROPERTY OF THE
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Docket No. E-01345A-19-0236

**Surrebuttal Testimony of
Cheryl Roberto**

**On Behalf of
Sierra Club**

December 4, 2020

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1 **I. INTRODUCTION AND QUALIFICATIONS**

2 **Q. Please state your name, title, and employer.**

3 A. My name is Cheryl Roberto. I am employed by Synapse Energy Economics, Inc.
4 as a Senior Principal. My business address is 485 Massachusetts Avenue,
5 Cambridge, MA 02139.

6 **Q. Have you previously submitted testimony in this matter?**

7 A. Yes. On behalf of Sierra Club, I submitted direct testimony in this proceeding on
8 October 2, 2020.

9 **Q. What is the purpose of your surrebuttal testimony?**

10 A. The purpose of my surrebuttal testimony is to respond to rebuttal testimony
11 submitted on behalf of Arizona Public Service (APS) related to APS-
12 recommended reporting requirements. My surrebuttal testimony supports elements
13 of the APS-recommended reporting requirements as described by APS witnesses
14 Lockwood and Whiting, but it also identifies key shortcomings in APS-
15 recommended reporting metrics. My testimony suggests enhancements to the
16 APS-recommended reporting metrics, together with an explanation for why these
17 improvements should be adopted. My testimony, however, does not attempt to
18 address every instance of disagreement between my direct testimony and that filed
19 by APS witnesses. Thus, silence on any issue should not be interpreted as
20 agreement.

21 **Q. What materials did you rely on to develop your testimony?**

22 A. The sources for my testimony and exhibits are public documents, industry
23 literature, and responses to discovery requests, as well as my personal knowledge
24 and experience.

1 **II. RESPONSES TO COMPANY REBUTTAL ON REPORTING REQUIREMENTS**

2 **Q. Did you prepare or direct the preparation of this testimony?**

3 A. Yes.

4 **Q. What is the APS recommendation regarding reporting requirements?**

5 A. As outlined by APS Witness Lockwood, and as supplemented by APS Witnesses
6 Whiting and Tetlow, APS recommends tracking and reporting the following
7 metrics:¹

- 8 • Customer rate selection statistics
 - 9 ○ Residential customer rate plan distribution
 - 10 ○ Number of customers on MEP
- 11 • Customer Care Center Performance
 - 12 ○ Percent of service calls answered within 30 seconds
- 13 • Customer satisfaction, as measured by J.D. Power's customer satisfaction
- 14 survey
- 15 • Customer complaints made to the ACC
- 16 • Overall distribution system performance
- 17 • Performance by geographical region
- 18 • System analysis and reliability impact by top outage cause code types
- 19 • Description of planned reliability maintenance programs
- 20 • Fire mitigation impacts on reliability statistics

21 Witness Whiting expressed her understanding that APS-recommended reporting
22 requirements were generally supported by Staff, Sierra Club, and RUCO.²

¹ Rebuttal Testimony of Barbara Lockwood at 26 [hereinafter "Lockwood Rebuttal"];
Rebuttal Testimony of Monica Whiting at 26-27 [hereinafter "Whiting Rebuttal"];
Rebuttal Testimony of Jacob Tetlow at 25 [hereinafter "Tetlow Rebuttal"].

² Whiting Rebuttal at 26.

1 **Q. Do you find the APS-recommended reporting metrics to be worthwhile?**

2 A. Yes. The recommended metrics should be useful indicators of APS performance in
3 the areas of customer service and reliability. In fact, three of the customer service
4 metrics are the same or similar to those which I proposed in my direct testimony.
5 Unfortunately, however, the APS recommended metrics are unduly constrained
6 and not comprehensive enough.

7 **Q. Did APS explain why it rejected the reporting metrics proposed in your direct**
8 **testimony?**

9 A. No. None of the APS Witnesses directly addressed metrics that I proposed but
10 which they did not recommend. APS Witness Whiting stated that she rejected
11 recommended metrics proposed by intervenors because the recommendations “are
12 too detailed and specific to very narrow issues.”³ She suggested that “tying
13 customer service too stringently to any specific metric can hamper overall
14 progress.”⁴ Although APS Witness Whiting did discuss why she rejected metrics
15 proposed by Staff related to disconnects and payment arrangements, which are
16 similar to those I proposed related to key indicia of credit and collection activities,
17 no other rejected metric was discussed. Witness Whiting explained she rejected the
18 credit and collection metrics because “APS already reports on these items in a
19 number of places.” APS Witness Whiting additionally suggested that establishing
20 “these kinds of reporting requirements” should be accomplished by rule in a
21 generic proceeding.⁵

22 **Q. How did APS describe its process for selecting these reporting metrics?**

23 A. Witness Lockwood explained that these metrics represent what “APS believes will
24 provide an appropriate overview of the Company’s performance in the areas of
25 greatest interest: customer service and reliability.”⁶ Witness Whiting testified, “I

³ *Id.* at 24.

⁴ *Id.* at 25.

⁵ *Id.* at 29-30.

⁶ Lockwood Rebuttal at 26.

1 agree that transparency is vital to continued improvement in customer service;
2 however, not all recommended reporting requirements are appropriate.”⁷ She
3 defines “appropriate” as “an appropriate set of reporting requirements should
4 provide meaningful insight into APS’s customer service and help track the
5 Company’s performance over time.”⁸ Witness Tetlow testified that, in responding
6 to proposals for increased reporting requirements, he recommends “an alternative
7 set of prudent and useful reports that balance the interest of stakeholders.”⁹

8 **Q. Do you find the APS Witnesses’ reasoning regarding the selection and**
9 **rejection of metrics to be persuasive?**

10 A. No. While customer service and reliability are important outcomes and an
11 excellent place to start with reporting metrics, electric utilities must be more
12 ambitious in the outcomes they deliver for customers. As described in the Utility
13 Performance Incentive Mechanisms Handbook, in order to address evolving
14 industry challenges, regulators are focusing on new aspects of utility performance,
15 including system efficiency, customer empowerment, the degree to which the
16 utility supports customers and service providers access to the grid, and
17 environmental goals.¹⁰ Reported metrics are a low-cost, low-risk way to monitor
18 many aspects of utility performance, and in the face of much uncertainty about
19 future grid challenges and priorities, erring on the side of reporting more, rather
20 than less, information is the sensible choice. APS’ characterization of the selected
21 metrics as “appropriate” adds little transparency or justification as to why and how
22 these are the only metrics worth tracking.

⁷ Whiting Rebuttal at 3.

⁸ *Id.* at 24.

⁹ Tetlow Rebuttal at 2.

¹⁰ Melissa Whited et al., *Utility Performance Incentive Mechanisms: A Handbook for Regulators* (Prepared for the Western Interstate Energy Board Mar. 9, 2015), available at https://www.synapse-energy.com/sites/default/files/Utility%20Performance%20Incentive%20Mechanisms%2014-098_0.pdf.

1 Metric reporting practices within other jurisdictions and utilities support
2 collecting a broad range of reported metrics. Most states that have implemented
3 performance-based regulation or performance incentives in recent years have
4 considered and established a much broader range of metrics than customer service
5 and reliability. Table 1 presents a summary of the number of outcomes and
6 metrics adopted in a few jurisdictions recently.

7 **Table 1 – Numbers of Metrics Adopted in Other States¹¹**

Jurisdiction	# Outcomes	# Metrics	Average # Metrics/Outcome
New York	6	19	3.2
Rhode Island	3	12	4.0
United Kingdom	6	21	3.5
Ontario	9	23	2.6
Puerto Rico	8	43	17.9

8 The Minnesota PUC issued an order on performance incentive mechanisms after a
9 stakeholder process. The order describes the number of metrics proposed by the
10 stakeholders and adopts several of those metrics. Table 2 summarizes the number
11 of metrics proposed and adopted by the Minnesota commission.

¹¹ Sources: Haw. Pub. Utilities Comm’n, Prioritized Outcomes, Regulatory Options, and Metric Development for Performance-Based Regulation in Hawaii, Appendix A (Nov. 14, 2018), *available at* https://www.michigan.gov/documents/mpsc/PBR_Staff_Report_3_Appendix_A-B_Consolidated__11.14.18_FINAL_640122_7.pdf. The Puerto Rico information is from Puerto Rico Energy Bureau. Resolution and Order, Case No. NEPR-MI 2019-0007 (P.R. Energy Bureau May 14, 2019), *available at* <https://energia.pr.gov/wp-content/uploads/sites/7/2019/06/MI20190007-Resolution-and-Order.pdf>. Note that Synapse assisted the PREB with this topic and this order. Note that some of these may be out of date.

1 **Table 2 – Metrics in Recent Minnesota Order¹²**

Outcome	Metrics Proposed	Metrics Adopted Now	Potential Future Metrics
Affordability	31	4	0
Reliability	33	7	4
Customer service quality	32	1	6
Environmental performance	44	6	0
Cost-effective alignment of generation and load	52	5	0
Workforce diversity	N/A	0	1
Total	192	23	11

2 **Q. Do you have a recommendation to enhance the APS-recommended reporting**
3 **metrics?**

4 A. Yes. I stand by my direct testimony in which I recommended that the Commission
5 direct APS to begin tracking additional metrics. This data will inform the
6 investigation regarding performance incentive mechanisms and will provide the
7 Commission and stakeholders with valuable information over time. APS
8 Witnesses have offered no reason to reject my recommendation.

9 **Q. Does this conclude your testimony?**

10 A. Yes, it does.

¹² Source: Order Establishing Performance Metrics, Docket No. E-0002/CI-17-401 (Minn. Pub. Utility Comm’n Sept. 18, 2019), *available at* <https://www.edockets.state.mn.us/EFiling/edockets/searchDocuments.do?method=showPoup&documentId={0082456D-0000-CA1F-9241-23A4FFF7C2FB}&documentTitle=20199-155917-01>.

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Docket No. E-01345A-19-0236

**Surrebuttal Testimony of
Tyler Comings**

**On Behalf of
Sierra Club**

December 4, 2020

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1 **I. INTRODUCTION AND QUALIFICATIONS**

2 **Q. Please state your name, business address, and position.**

3 A. My name is Tyler Comings. I am a Senior Researcher at Applied Economics Clinic,
4 located at 1012 Massachusetts Avenue, Arlington, Massachusetts.

5 **Q. Are you the same Tyler Comings who filed direct testimony in this case?**

6 A. Yes.

7 **Q. What is the purpose of your surrebuttal testimony?**

8 A. My surrebuttal testimony primarily responds to the rebuttal testimony filed by
9 Arizona Public Service (“APS” or “Company”) witness Brad J. Albert. I focus on
10 Mr. Albert’s discussion of the retirement of Four Corners units 4 and 5. I also
11 briefly discuss the prudence of the SCR controls installed at the units.

12 **Q. Does your surrebuttal testimony fully address the Company’s response to**
13 **Chairman Burns’ request for an early retirement analysis of Four Corners**
14 **units 4 and 5?**

15 A. No. I discuss aspects of the analysis that are presented in Mr. Albert’s testimony. I
16 anticipate that Sierra Club will file a response to the Company’s analysis by the
17 December 31, 2020 date set by Chairman Burns.

18 **Q. Please summarize your surrebuttal findings.**

19 A. The Company largely mischaracterizes my testimony and uses these misplaced
20 criticisms to evade responsibility for considering retiring the Four Corners units
21 prior to 2031. While the Company provides a limited retirement analysis, it was
22 only done in response to a Chairman’s request and does not fully answer that

1 request, as the Company fails to evaluate a 2023 retirement. Additionally, the
2 Company undercuts this limited response to the Chairman by making unsupported
3 claims that early retirement of the units could be infeasible because of 1) the scale
4 of battery storage replacement, and 2) the required agreement of the other co-
5 owners. However, the amount of battery storage replacement was pre-determined
6 by the Company and its consultant (E3) rather than part of a cost-based plan. If APS
7 contends that its own portfolio is infeasible, it should have developed one that it
8 considered feasible. Regarding the units' co-owners, the Company has agency as
9 operator and majority owner to take a leadership role on evaluating the units' future
10 and fostering consensus.

11 Finally, the prudence of the SCR investment decision at Four Corners units has not
12 yet been determined by the Commission but there is reason to find imprudence for
13 APS's failure to re-evaluate this major investment decision.

14 **Q. Have your findings and recommendations from your direct testimony**
15 **changed?**

16 **A. No.**

17 **II. RESPONSES TO COMPANY REBUTTAL ON FOUR CORNERS RETIREMENT**

18 **Q. Does the Company falsely claim that you recommended that the Four Corners**
19 **units be replaced entirely with market purchases rather than steel-in-the-**
20 **ground resources?**

21 **A. Yes.** Mr. Albert states that my testimony recommended replacing the two Four
22 Corners units with "market purchases" and responds that "APS is opposed,

1 however, to relying on non-asset backed market purchases...”¹ However, Mr.
2 Albert’s testimony on this point is not responsive to any argument that I made. My
3 testimony explicitly recommended new steel-in-the-ground resource replacements
4 for the two coal units. Most notably, one subsection of my testimony was titled:
5 “Even After a Major Investment Was Completed, Continued Operation of the Units
6 Should Have Been Tested Against Competitively Priced Renewables and Storage
7 Resources.”² That section of my direct testimony discussed at length the costs of
8 new renewable and storage resources, and the process for procuring such resources
9 that other utilities have conducted. At no point did I recommend “non-asset backed
10 market purchases.” Thus, this criticism of my testimony is inaccurate and should be
11 ignored.

12 **Q. Does the Company claim it is likely unable to find reliable replacement**
13 **resources for Four Corners before 2031?**

14 **A.** Yes. Mr. Albert dismisses the idea of resource replacement for the two units, stating
15 that “the market is too tight to assume that it can provide for the reliable
16 replacement of Four Corners 4 and 5 if they were to retire early.”³ This conclusion
17 is misleading because the “market” for the steel-in-the-ground replacement
18 resources, like those I have recommended, is created by utilities (such as APS) or
19 power customers (such as cities or businesses) actively seeking new resources,
20 often for replacement of retiring resources. New resources are built in response to
21 (or in anticipation of) demand for such resources: that is how the market works.

¹ Rebuttal Testimony of Brad J. Albert at 4:18-26 [hereinafter “Albert Rebuttal”].

² Direct Testimony of Tyler Comings at 22:6-8 [hereinafter “Comings Direct”].

³ Albert Rebuttal at 4:15-17.

1 I recommended in my direct testimony that the Company solicit new resources, as
2 other utilities have done through an all-source request for proposals (RFP). The
3 stance that “the market is too tight” for replacing the coal units is unfounded and
4 indicative of passive planning. If the Company plans to simply wait for replacement
5 resources to appear, it could wait a long time. Instead, the Company should actively
6 solicit new resources to consider replacement of Four Corner prior to 2031; APS’s
7 rebuttal testimony indicates the Company is simply choosing not to do so. The
8 Company has issued RFP’s for specific resource types recently, but for replacing
9 Four Corners, it should be casting a wider net by including allowing all resource
10 types and ownership structures.⁴

11 **Q. Would you recommend that the Company pursue a reliable replacement for**
12 **the coal units?**

13 A. Of course. As I discussed in my direct testimony, in a recent case, I was part of a
14 team that proposed a portfolio composed of actual bids in response to an all-source
15 RFP issued by Public Service Company of New Mexico (“PNM”) to replace its
16 share of the retiring San Juan coal units (497 MW). PNM actively sought new
17 replacement resources, collecting hundreds of new resources bids, and conducted
18 modeling of many of those resources. My team and I used PNM’s bids to construct
19 a portfolio, conducting alternative modeling which accounted for reliability
20 requirements.⁵ Ultimately, our proposed portfolio (“CCAIE 1”), which included 650

⁴ See Press Release, Ariz. Pub. Service, APS issues RFPs for solar and wind energy resources (Sept. 12, 2019), *available at* <https://www.aps.com/en/About/Our-Company/Newsroom/Articles/APS-issues-RFPs-for-solar-and-wind-energy-resources>.

⁵ Order on Recommended Decision on Replacement Resources – Part II at 11, Docket No.

1 MW of solar and 300 MW of battery storage, was approved by the New Mexico
2 Commission instead of PNM's preferred portfolio, which would have relied on less
3 solar and battery storage in favor of new natural gas. The New Mexico Commission
4 stated that our portfolio "satisfies the threshold requirement that a replacement
5 resource be reliable" and "should be the preferred resource among the reliable
6 resources presented for consideration by the Commission."⁶

7 The thrust of my direct testimony in this case was that APS should seek new
8 resources to replace the Four Corners units and that such replacement is likely to be
9 lower-cost. I provided an analysis of the savings from different price points per
10 MWh, regardless of the type of resource, including a "breakeven" price of between
11 \$61.5 and \$84.1 per MWh (depending on the cost scenario) below which replacing
12 the units would be lower-cost.⁷ For replacement resources between \$30 per MWh
13 and \$50 per MWh, I found that retiring Four Corners in 2023 would save between
14 \$775 million and \$1.54 billion—using the Company's 2020 IRP base case
15 assumptions.⁸ However, my analysis was a starting point for further exploration,
16 not a blueprint for exactly which replacement resources APS should use. If APS
17 solicited a competitive pool of new resources, it could develop a specific portfolio
18 for replacing Four Corners. Any replacement portfolio should meet minimum
19 reliability requirements; no intervenor is likely to suggest otherwise.

19-00195-UT, (N.M. Pub. Reg. Comm'n July 29, 2020), *available at*
https://edocket.nmprc.state.nm.us/AspSoft/HandlerDocument.ashx?document_id=1191982
(login credentials to the NMPRC docket site required for access).

⁶ *Id.*

⁷ Comings Direct at 37-40.

⁸ *Id.* at Section III.

1 **Q. Do you have concerns with the Company’s discussion of its response to the**
2 **Chairman’s request for an early retirement analysis?**

3 A. Yes, I have several concerns with the Company’s discussion. I intend to more fully
4 address the analysis in the Sierra Club’s response due December 31, 2020. At this
5 point, I am concerned that the Company is attempting to undercut the premise of
6 the Chairman’s request, in several ways, including by: 1) refusing to conduct an
7 analysis of 2023 retirement per the Chairman’s request; 2) attempting to debunk the
8 possibility of 2026 retirement based on a pre-determined portfolio that was not
9 optimized on a cost-basis; and 3) generally, offering further invalid excuses for why
10 APS cannot retire the units prior to 2031.

11 First, the Chairman requested a retirement analysis for several years including
12 2023. The Company, however, neglects to model 2023 retirement stating that 2023
13 would not provide enough time to reliably replace the units.⁹ However, if the
14 Company was skeptical about being able to fill a reliability need by 2023, it could,
15 for example, consider staggering the retirement of the units; but it has not done so.

16 Second, the Company and its consultant (E3) does not develop a cost-based
17 portfolio but rather assumes a pre-determined mix of replacement resources, yet
18 simultaneously claims that its own made up portfolio could be infeasible in 2026.

19 The Company expresses concerns about replacing the units in 2026 (i.e., in six
20 years) because of the 1,400 MW of battery storage replacement assumed by E3.¹⁰

21 However, the Company states that E3 “assumed it would take” this level of battery

⁹ Albert Rebuttal at 15 n.4.

¹⁰ *Id.* at 16:17-17:21.

1 storage (in addition to other resources in the portfolio) to replace the units. The
2 Company also states that the retirement analysis, including the 1,400 MW of
3 storage, “was not designed to create an optimized portfolio.”¹¹ Because the
4 portfolio was pre-selected before being vetted for costs and/or feasibility, the
5 purported barriers to its adoption should not be taken seriously. While the
6 Company’s response to the Commission is useful in that it shows substantial
7 savings from employing securitization to recover capital invested in the units, APS
8 did not attempt to find a cost-effective replacement alternative to the continued
9 operation of the units.¹² Thus, as it stands, the Company’s retirement analysis
10 should not be relied upon to draw conclusions about what the optimal (or feasible)
11 retirement dates are for the Four Corners units.

12 Even if the 1,400 MW of battery storage *were* part of an optimal portfolio, the
13 Company uses historical data on battery storage development to express skepticism
14 that a high level of new battery development could be achieved.¹³ The Company’s
15 comparison of battery storage developed in the U.S. from 2012-2019, however, is
16 not a fair one because the battery storage has only recently become a low-cost
17 resource option and capacity has increased rapidly as a result. These costs are
18 expected to continue to decline and, as a result, there are substantial battery storage
19 projects planned in the U.S.: according to the EIA, there will be 3,616 MW of new

¹¹ APS Response to SC 9.2e.

¹² Sierra Club witness Cheryl Roberto addresses securitization in more detail in her testimony.

¹³ Albert Rebuttal at 16:17-17:21.

1 installations between 2020 and 2023.¹⁴ In reporting this number, the EIA stated that
2 this is likely an underestimate:

3 Given the short planning period required to install a storage
4 facility, the reported planned capacity does not necessarily reflect
5 all the possible builds during this period, but the reported planned
6 capacity can be used as an indicator of trends.¹⁵

7 Battery storage has only recently become a prominent replacement resource. This
8 trend is only expected to accelerate in the future given the declining technology
9 costs. The Company's historic look is therefore irrelevant to whether a 2026
10 replacement is feasible. Even if the Company could persuasively show that 1,400
11 MW of battery storage is infeasible, then it should propose a different replacement
12 portfolio.

13 Finally, the Company's additional excuses for why it has not previously considered
14 retirement of the units prior to 2031 are not persuasive. The Company claims that it
15 has not conducted the analysis of pre-2031 retirement because it needs agreement
16 with the other co-owners and because community transition needs to be
17 considered.¹⁶ As with its discussion of the market for new resources, the Company
18 appears to take a passive position where it, in fact, could have sway. APS has
19 agency as the majority owner and operator of the Four Corners units; thus, it should
20 take a leadership role in evaluating the units' futures and initiating an agreement on
21 this future. Additionally, an assessment of the community impacts is important and

¹⁴ U.S. Energy Information Administration (EIA), U.S. Dept. of Energy, *Battery Storage in the United States: An Update on Market Trends* at 26 (July 2020), available at https://www.eia.gov/analysis/studies/electricity/batterystorage/pdf/battery_storage.pdf.

¹⁵ *Id.* at 26.

¹⁶ Albert Rebuttal at 13:3-12.

1 could be undertaken at the same time that the Company considers the costs and
2 risks to ratepayers that will result from continued operation of Four Corners.
3 Notably, APS's rebuttal testimony presents a coal community transition plan as part
4 of this rate case;¹⁷ demonstrating that transition can be considered in tandem with a
5 realistic retirement analysis. Moreover, as mentioned before, staggered unit
6 retirements have not been considered, yet these options would provide more time
7 for coal community transition planning. Ultimately, it is not clear why acquiring
8 agreement with co-owners and addressing community impacts cannot be achieved
9 for a retirement date earlier than 2031—eleven years from now.

10 **III. THE PRUDENCE OF THE SCR INVESTMENTS**

11 **Q. Has the prudence of the SCR controls at Four Corners been decided by the**
12 **Commission?**

13 A. No. As I discussed in my direct testimony, the Commission has not ruled on the
14 prudence of APS's decision to install SCRs.¹⁸ I also discussed how the Company
15 failed to re-evaluate the SCR decision prior to starting construction, in the face of
16 worsening economic conditions for the units.¹⁹ After starting the construction, as
17 conditions continued to disfavor coal generation, the Company still did not re-
18 evaluate the decision and claimed no responsibility for doing so.²⁰ For this reason,
19 although I did not take a position in my Direct Testimony about whether the

¹⁷ Rebuttal Testimony of Jeff Guldner at 8-10; Rebuttal Testimony of Barbara Lockwood at 19-23.

¹⁸ Comings Direct at 9:7-10:2, 17:4-9.

¹⁹ Comings Direct at 15:6-17:3.

²⁰ Comings Direct at 18:21-19:10.

1 Commission should disallow the SCRs, I noted that there were significant reasons
2 to be skeptical about the prudence of that investment.

3 **Q. How would a disallowance of the SCRs impact APS's rate request?**

4 A. Commissioner Márquez Peterson in her November 17 letter expressed concern
5 about costs to customers and the Company's performance.²¹ While disallowing the
6 SCR expenditures would not reduce APS's existing rates, the SCR investments are
7 a major investment that the Company is attempting to include in rates in this case.
8 A finding by the Commission that the SCRs were imprudent would thus
9 dramatically reduce APS's requested rate increase. As I presented in my direct
10 testimony, there is reason to think that the SCR decision or continuation of the
11 project's construction were imprudent: namely, the Company did not re-evaluate
12 the decision despite worsening economic conditions for coal generation at the time,
13 which a prudent utility would have done. New Mexico Public Regulation
14 Commission (NMPRC) disallowed costs associated with these same projects for
15 Public Service of New Mexico (PNM, a co-owner of Four Corners) citing that
16 utility's similar failure to update its analysis.²²

17 **Q. Does this conclude your surrebuttal testimony?**

18 A. Yes.

²¹ Commissioner Peterson Letter, Docket No. E-01345A-19-0236 (Nov. 17, 2020),
available at <https://docket.images.azcc.gov/E000010132.pdf>.

²² Comings Direct at 17:10-18:18.

IN THE MATTER OF THE APPLICATION OF
ARIZONA PUBLIC SERVICE COMPANY FOR A
HEARING TO DETERMINE THE FAIR VALUE
OF THE UTILITY PROPERTY OF THE
COMPANY FOR RATEMAKING PURPOSES, TO
FIX A JUST AND REASONABLE RATE OF
RETURN THEREON, TO APPROVE RATE
SCHEDULES DESIGNED TO DEVELOP SUCH
RETURN.

Docket No. E-01345A-19-0236

**Surrebuttal Testimony of
Sandy Bahr**

**On Behalf of
Sierra Club**

December 4, 2020

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1 **I. INTRODUCTION AND QUALIFICATIONS**

2 **Q. Please state your name, position, and organization address.**

3 A. My name is Sandy Bahr. I am the Chapter Director of Sierra Club's Grand Canyon
4 Chapter, which is Sierra Club's Arizona chapter. My organization's address is 514 W
5 Roosevelt St, Phoenix, Arizona 85003.

6 **Q. What are your professional qualifications?**

7 A. I am the Chapter Director for Sierra Club's Grand Canyon Chapter, a position I have
8 enjoyed since January 1998. I have an A.A.S. from Michigan Technological University, a
9 B.A. in Environmental Studies from Prescott College, and an M.A. in Legal Studies from
10 Arizona State University. I have engaged in various processes at the Arizona Corporation
11 Commission for nearly two decades, primarily through public comment.

12 **Q. Did you previously file testimony in this proceeding?**

13 A. No.

14 **Q. Have you previously testified before the Arizona Corporation Commission?**

15 A. Yes, I testified in opposition to allowing a facility that burned trash to be considered a
16 renewable energy resource in Mohave Electric Cooperative, Inc.'s application for
17 "Approval of a Waste-To-Energy Facility as a Pilot Program Under the Renewable
18 Energy Rules or, in the Alternative, for a Limited Waiver" (Docket No. E-01750A-10-
19 0453). I also testified before the Arizona Power Plant and Transmission Line Siting
20 Committee in 2006 in opposition to a proposal by Southern California Edison to site the
21 Devers to Palo Verde II Transmission Line through the Kofa National Wildlife Refuge
22 (Docket No. L-00000A-06-0295-00130).

23 **Q. For whom are you testifying?**

24 A. I am testifying on behalf of Sierra Club.

1 **II. RESPONSES TO COMPANY REBUTTAL ON A JUST AND EQUITABLE**
2 **TRANSITION**

3 **Q. What is the purpose of your testimony?**

4 A. The purpose of my testimony is to support the just and equitable transition, as supported
5 by the Navajo Nation as well as San Juan Citizens Alliance, Diné CARE, and Tó Nizhóní
6 Ání (“Citizen Groups”), for coal communities impacted by recent and impending
7 retirement of coal plants owned by Arizona Public Service Company (“APS”). These just
8 and equitable transition provisions are outlined by APS in pages 8-10 of Jeff Guldner’s
9 Rebuttal Testimony and in pages 19-23 of Barbara Lockwood’s Rebuttal Testimony.

10 **Q. Please describe the just and equitable transition provisions you are supporting?**

11 A. These provisions include \$128.75 million in funding for the just and equitable transition
12 related to closure of Four Corners Power Plant and the Cholla Generating Station, as well
13 as last year’s closure of the Navajo Generating Station. The proposed transition plan
14 includes cash payments of \$10 million per year to the Navajo Nation over the next ten
15 years (for a total of \$100 million) and \$250,000 per year for economic development from
16 shareholder funds for up to two years prior to and three years after the closure of the Four
17 Corners Power Plant. APS also requests changes to extending distribution lines at no cost
18 in order to accommodate the longer distances required on the Navajo Nation. The
19 company will fund \$10 million in additional electrification projects within the Navajo
20 Nation, \$5 million of which will be funded by shareholders. APS also commits to obtain
21 proposals for at least 600 MW of clean energy projects on or near the Navajo Nation.

22 APS also proposes providing \$12 million to neighboring Navajo County communities to
23 assist in a transition for the Cholla Generating Station, including \$1.1 million in
24 shareholder dollars. The Hopi Tribe will receive \$3.7 million, including \$0.35 million in
25 shareholder funds, related to last year’s retirement of the Navajo Generating Station.

26 **Q. Why are you supporting these provisions?**

27 A. The era of coal-fired power plants is coming to an end due in part to the poor economics
28 of coal and the need to reduce carbon emissions associated with the climate crisis. The
29 Navajo Generating Station ceased operation in 2019, the Cholla Generating Station will

1 stop its coal combustion in 2025, and the Four Corners Power Plant will close no later
2 than 2031. We need APS to plan for and invest in that coal-free future now—it has a
3 responsibility to do so. Coal-impacted communities, including the Navajo Nation, need
4 resources to plan a just and equitable transition away from coal in order to protect and
5 sustain their economies and communities. The Navajo Nation communities that will be
6 most affected by the closure of the Four Corners Power Plant have already been heavily
7 affected by the retirement of the Navajo Generating Station and will soon be impacted by
8 the retirement of the Cholla Generating Station. APS, other utilities, and their ratepayers,
9 which have all benefitted from coal-combustion at these plants, have a responsibility to
10 help provide for a just and equitable transition to clean energy resources.

11 **Q. Has the Arizona Corporation Commission recognized the need for just and**
12 **equitable transition funding for communities impacted by coal plant closures?**

13 A. Yes, the Arizona Corporation Commission (“Commission”) recently approved two
14 measures to advance a just and equitable transition for coal-impacted communities.

15 **Q. Would you please describe those recent actions by the Commission?**

16 A. In response to a proposal submitted by Tó Nizhóni Ání, Diné CARE, and the Black Mesa
17 Trust in the APS 2020 Demand Side Management Plan proceeding, the Commission
18 directed APS, “as part of its corporate obligations to support a just and equitable
19 transition of communities impacted by early power plant closure,” to develop and
20 implement a Tribal Energy Efficiency Program to support energy efficiency projects in
21 both Navajo and Hopi communities “impacted by the closure of coal-fired power plants
22 that Arizona Public Service Company owns or operates, including Navajo Generating
23 Station, Four Corners Power Plant and Cholla Power Plant.”¹ As the cheapest and
24 cleanest energy resource, energy efficiency in these communities will help reduce
25 emissions, water use, and electric bills, as well as keep people more comfortable in their
26 homes. According to Demand Side Management reports filed by APS and TEP, from

¹ Decision No. 77763 at 38:12-14, Docket No. E-01345A-19-0088 (Ariz. Corp. Comm’n Oct. 02, 2020), *available at* <http://docket.images.azcc.gov/0000202208.pdf>.

1 2010-2017, for every \$1 of ratepayer money invested in energy efficiency in Arizona,
2 there was a return of \$3.92 in benefits to ratepayers.²

3 On November 13, 2020, the Commission approved another just and equitable transition
4 provision as part of the clean energy rules package that is subject to the formal rule-
5 making process.³ The rules require affected utilities, including APS, to develop integrated
6 resource plans that give preference for siting of renewables in communities that are
7 impacted by the closure of conventional generation—coal and gas—and associated
8 mining facilities.

9 Together, these two decisions by the Commission demonstrate recognition of the need for
10 a just and equitable transition for coal-impacted communities associated with the closure
11 of Four Corners Power Plant, Cholla Generating Station, and the Navajo Generating
12 Station. Including the provisions proposed by APS in this rate case is the next critical step
13 in this transition and in beginning to address some of the historic and ongoing injustices
14 associated with these coal-fired power plants.

15 **Q. Do you support shareholder funding for the just and equitable transition?**

16 A. Yes, it is my opinion that shareholders should do their part to assist with this transition
17 away from coal-fired power plants.

18 **Q. Do Arizonans support funding for a just and equitable transition?**

19 A. Yes they do. According to a recent poll directed by the Arizona PIRG Education Fund
20 and conducted by WPA Intelligence, more than eight-in-ten (83%) Arizonans think it is
21 “very” (56%) or “somewhat” (27%) important that the owners of the Navajo Generating
22 Station provide financial assistance and support such as job training to communities
23 impacted by the plant’s closure.

² Comments from Southwest Energy Efficiency Project, et al. at 2, Docket No. E-01345A-19-0088 (Ariz. Corp. Comm’n May 22, 2020), *available at* <https://docket.images.azcc.gov/E000006697.pdf>.

³ Decision No. 77829 at 63, Docket No. RU-00000A-18-0284 (Ariz. Corp. Comm’n Nov. 23, 2020), *available at* <https://docket.images.azcc.gov/0000202570.pdf>.

1 **Q. How is APS seeking to recover from ratepayers the costs of its just and equitable**
2 **transition commitments?**

3 A. APS is proposing to utilize an Advanced Energy Mechanism to recover the costs and
4 certain expenses associated with renewable energy investments and to replace current
5 mechanisms for paying for demand side resources and that enable revenue recovery for a
6 portion of its lost fixed costs. It is also proposing to collect funds for the just and
7 equitable transition package via this mechanism, excluding the portion of those funds that
8 will come from shareholders.

9 **Q. Do you have an opinion on whether the Commission should approve the advanced**
10 **energy mechanism?**

11 A. Not at this time. I am not an expert on utility economics, and Sierra Club is still
12 evaluating this mechanism. However, Sierra Club strongly supports cost recovery for just
13 and equitable transition funding as well as the prudently incurred costs of energy
14 efficiency and renewable energy resource investments.

15 **Q. In your experience as a public interest advocate at the Commission, what are the**
16 **key aspects to any ratepayer recovery mechanisms?**

17 A. Whenever ratepayer recovery mechanisms are utilized, it is important that it be clear what
18 the dollars are funding and that costs as well as saving be transparent and understandable.
19 It is also important that stakeholders be able to participate in a meaningful way in any
20 process to establish the mechanism or any adjustments to it. For example, the process
21 associated with the review and approval of demand side management plans and their
22 associated budgets has generally afforded robust transparency and participation.
23 However, to the extent APS is requesting a prudence determination outside of a typical
24 rate case, additional process like a contested hearing is appropriate.

25 **Q. Are there any other aspects of the AEM that you would like to comment on?**

26 A. Yes. I want to add that I strongly support the utility investment in energy efficiency, the
27 cheapest and cleanest energy resource, and a mechanism for funding these efficiency
28 investments in this rate case.

1 **Q. Do you have any closing remarks?**

2 A. There is a historic opportunity to provide coal-impacted communities on the Navajo
3 Nation, Hopi, and in and around the Cholla Generating Station with funding for a
4 transition to clean energy and sustainable economic opportunities. I support the proposals
5 that APS has filed for this purpose and support the Navajo Nation, Hopi Tribe, and
6 Citizen Groups in achieving a just and equitable transition from coal-fired power plants
7 to clean solar energy and wind.

8 **Q. Does this conclude your surrebuttal testimony?**

9 A. Yes.